Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A driving control device for a motor having a plurality of multi-phase coils ~~for generating~~configured to generate a rotating magnetic field to cause a rotor to rotate, comprising:

a ~~phase current~~ measuring device ~~for measuring~~configured to measure one or more ~~a~~ phase ~~current or~~ currents[[,]] ~~among~~ selected from a plurality of independent phase currents ~~of~~ corresponding to the plurality of multi-phase coils, ~~of~~ a number of phase currents being measured limited to ~~in~~ a range between one and a number smaller than a total number of the independent phase currents;

a control signal generating circuit ~~for estimating~~connected to said measuring device and configured to estimate a state of ~~a~~ said motor by using the measured one or more phase ~~current or~~ currents and one of a motor model ~~or~~ and a model showing a state of the motor, said control signal generating circuit further configured to generate a driving control signal based on ~~an estimation result to be supplied to the motor~~ said estimated state, said driving control signal used by said driving control device to control each of the phase currents~~,~~

~~wherein~~

~~each of the phase currents of the motor is controlled based on the driving control signal supplied from the control signal generating circuit.~~

Claim 2 (Currently Amended): A driving control device for a motor having a plurality of multi-phase coils ~~for generating~~configured to generate a rotating magnetic field to cause a rotor to rotate, comprising:

~~an addition phase current~~ a measuring device ~~for measuring~~configured to measure one

or more ~~an~~ addition phase ~~current or~~ currents selected from a plurality of addition phase

currents, ~~of~~ a number of phase currents being measured limited to ~~in~~ a range between one and

a number smaller than a total number of addition phase currents, the addition phase current

being an addition of phase currents of at least two of the plurality of multi-phase coils; and

a control signal generating circuit connected to said measuring device and configured

to estimate ~~for estimating~~ a state of ~~a~~ said motor by using the measured one or more addition

phase ~~current or~~ currents and one of a motor model ~~or~~ and a model showing a state of the

motor said control signal generating circuit further configured to generate a driving control

signal based on said estimated state, said driving control signal used by said driving control

device to control each of the phase currents~~an estimation result to be supplied to the motor,~~

~~wherein~~

~~each of the phase currents of the motor is controlled based on the driving control~~

~~signal supplied from the control signal generating circuit~~.

Claim 3 (Currently Amended): The device according to claim 2, further comprising:

a ~~neutral point current~~second measuring device ~~for measuring~~configured to measure a

current flowing between neutral points of two of the plurality of multi-phase coils, the two

multi-phase coils being connected to each other at respective neutral points,

wherein

the ~~addition phase current measuring device measures~~ number of phase currents being

measured is at least two~~ addition phase currents~~, and

the control signal generating ~~circuits~~circuit is connected to said second measuring

device and is further configured to use ~~utilizes~~ the measured neutral point current, the at least

two measured addition phase currents, and <u>said motor model is</u> a linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 4 (Currently Amended): The device according to claim 2, further comprising:

a ~~neutral point current~~<u>second</u> measuring device ~~for measuring~~<u>configured to measure</u> a current flowing between neutral points of two of the plurality of multi-phase coils, the two multi-phase coils being connected to each other at respective neutral points,

wherein

<u>the number of phase currents being measured is at least two, and</u>

the control signal generating <u>circuit is connected to said second measuring device and is further configured to use</u>~~circuits utilizes~~ the measured neutral point current, the at least two measured addition phase currents, and <u>said motor model is</u> a non-linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 5 (Currently Amended): The device according to claim 2, wherein at least two of the plurality of multi-phase coils are independent, the addition phase current measuring device ~~measures~~<u>is configured to measure</u> at least two addition phase currents, and the ~~control signal generating circuit utilizes~~<u>motor model is</u> a linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 6 (Currently Amended): The device according to claim 2, wherein at least two of the plurality of multi-phase coils are independent, and the ~~control signal generating circuit utilizes~~<u>motor model is</u> a non-linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 7 (Currently Amended): The device according to claim 2, wherein the <u>plurality of</u> multi-phase coil<u>s</u> is a three-phase coil.

Claim 8 (Currently Amended): The device according to claim 1, further comprising:

a ~~neutral point current~~<u>second</u> measuring device ~~for measuring~~<u>configured to measure</u> a current flowing between neutral points of two of the plurality of multi-phase coils, the two multi-phase coils being connected to each other at respective neutral points,

wherein

<u>the number of phase currents being measured is at least two, and</u>

the control signal generating circuits utilizes the measured neutral point current, the at least two measured addition phase currents, and <u>the motor model is</u> a non-linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 9 (Currently Amended): The device according to claim 1, wherein at least two of the plurality of multi-phase coils are independent, and the ~~control signal generating circuit utilizes~~<u>motor model is</u> a non-linear model ~~as the motor model or the model showing a state of the motor~~.

Claim 10 (Currently Amended): The device according to claim 1, wherein the <u>plurality of</u> multi-phase coil<u>s</u> is a three-phase coil.